

**REMARKS**

Claims 1-5 are pending in this application, with Claim 1 being independent. Claim 1 has been amended to clarify that the web having an applied pattern of add-on material is that of a cigarette wrapper. No new matter has been added.

Initially, Applicants would like to thank Examiner Fortuna for the courtesies extended during the telephonic interview on April 12, 2007, during which the amendment to Claim 1 was discussed.

Reconsideration of the outstanding rejections in view of the following remarks is respectfully requested.

**CLAIM REJECTION UNDER 35 U.S.C. §103(a)**

Claims 1-5 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 5,997,691 ("Gautam"). The reasons for the rejection are stated on pages 3-5 of the final Official Action. This rejection is respectfully traversed.

Specifically, the final Official Action asserts,

The only difference between the claimed invention and Gautam et al. invention is that the way in which the add-on material is ground, i.e., Gautam et al. teach a wet grinding process, while the present application teaches the dry comminution of the add-on materials. However, using either process of grinding is within the levels of ordinary skill in the art, since both of them are very well known in the art. Note that if one desires to do the dry grinding operation, then the steps of pressing and drying the slurry are [] necessary and also very well known in the dry market pulp. Wet and dry grinding are functional equivalent processes. . . . (Page 3)

However, as explained in the present specification, "dry grinding" results in add-on material having a very narrow range of cellulose fiber sizes, and as a result the areas of the cigarette paper having the add-on material provide consistent and predictable performance; the add-on material is produced in much shorter time and with consumption of less energy than would be required to produce similar add-on material having a comparably narrow range of fiber sizes using techniques wherein a wet slurry material is repeatedly refined using multi-disk refiners. (Page 3, Paragraph [0010]).

The final Official Action asserts that in the Official Action mailed July 24, 2006, the Examiner cited enough evidence of the equivalence of wet and dry grinding,

referring to the references recited in the footnote on page 3. Applicants point out that the references recited in the footnote on page 3 were cited "[f]or example of dry grinding operation", rather than the equivalence of wet and dry grinding. The final Official Action further cites U.S. Patent No. 3,596,840 ("Blomqvist"), U.S. Patent No. 6,214,166 ("Münchow"), and U.S. Patent Application Publication No. 2005/0167534 ("Tomikawa") as evidence of the equivalence of wet and dry grinding. Applicants respectfully submit that none of Blomqvist, Münchow, or Tomikawa provide evidence of the equivalence of wet and dry grinding, especially in a method for preparing a slurry of add-on material to be applied in a predetermined pattern on a base web.

"In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992); MPEP § 2141.01(a).

Applicants respectfully submit that none of Blomqvist, Münchow, or Tomikawa is reasonably pertinent to the particular problem with which the inventor was concerned or in the field of Applicants' endeavor, namely, a method and apparatus for preparing a slurry of add-on material to be applied in a predetermined pattern on a base web, preferably in the form of bands, and more particularly, to a method and apparatus for producing cigarette paper having banded regions of the additional material. (Page 1, Paragraph [0001]). Accordingly, the Examiner has inappropriately relied on Blomqvist, Münchow, and Tomikawa in support of the rejection of Claims 1-5.

Blomqvist provides a process for producing disintegrated (fluffed) dry cellulose fibers for use in products such as diapers, absorbent pads and roll, and the like. (Abstract). The final Official Action asserts that Blomqvist "teaches in column 1, lines 46-56, some of the advantages of using dry grinding, instead of wet grinding." (Final Official Action, Page 4). However in column 1, Blomqvist in fact teaches some of the advantages of producing cellulose fluff starting from pulp in sheet form, instead of loosely compressed roll pulp. With regard to wet grinding, Blomqvist merely discloses, "it is surprising that it is possible to treat dry pulp in a disk refiner in which otherwise only wet pulp can be treated." (Column 1, Lines 58-60). Thus,

Blomqvist does not provide any evidence of the equivalence of wet and dry grinding, and the process of Blomqvist produces disintegrated (fluffed) dry cellulose fibers, rather than disclosing mixing disintegrated (fluffed) dry cellulose fibers with water to hydrate the disintegrated (fluffed) dry cellulose fibers and produce a slurry.

Münchow relates to a process for recycling fillers and coating pigments from the preparation of paper, paperboard and cardboard found in the residual water sludges from coating plant waste waters, deinking plants, internal water treatment plants or separators, and to the use of a thus obtained pigment slurry for the preparation of a coating compound for the paper industry or in the paper stock for papermaking. (Abstract). Münchow discloses that the residual water sludges are first given desired whiteness and fineness by mixing and then milling together with fresh pigments or fresh fillers in the form of powders, fresh-pigments containing slurries and/or fresh-filler containing slurries, and then used as a filler or coating pigment. (Column 3, Lines 17-23). Münchow further discloses, "The mineral fillers and pigments mentioned are usually milled to give the desired grain size in a wet or dry milling method." (Column 3, Lines 23-25). Thus, Münchow does not provide any evidence of the equivalence of wet and dry grinding, specifically of an add-on material comprising fibrous cellulosic material.

Tomikawa relates to a dry grinding system which is suitable for use in production, for example, abrasives or filler; and to a dry grinding method employing the system. (Page 1, Paragraph [0003]). Tomikawa discloses that in general, ceramic powder such as alumina powder or silicon carbide powder, which is employed as, for example, abrasive or fillers, is produced through grinding of raw material powder having a large average particle size. (Page 1, Paragraph [0003]). Tomikawa further discloses, "Grinding processes include a dry grinding process and a wet grinding process. When a dry product is to be produced by means of a grinding process, in many cases, a dry grinding process, which does not require a drying step, is employed." (Page 1, Paragraph [0003]). Thus, Tomikawa does not provide any evidence of the equivalence of wet and dry grinding, specifically of an add-on material comprising fibrous cellulosic material. Tomikawa discloses dry grinding of raw material powder having a large average particle size to produce ceramic powder such as alumina powder or silicon carbide powder, which is

employed as, for example, abrasive or fillers, rather than disclosing mixing a milled add-on material comprising fibrous cellulosic material with water to hydrate the add-on material and produce a slurry.

Rebuttal of a *prima facie* case of obviousness is merely "a showing of facts supporting the opposite conclusion." *In re Heldt*, 433 F.2d 808, 167 USPQ 676 (CCPA 1970). Facts established by rebuttal evidence must be evaluated along with the facts on which the conclusion of obviousness was reached, not against the conclusion itself. *In re Eli Lilly & Co.*, 902 F.2d 943, 14 USPQ2d 1741 (Fed. Cir. 1990); MPEP § 2142. "If rebuttal evidence of adequate weight is produced, the holding of *prima facie* obviousness, being but a legal inference from previously uncontradicted evidence, is dissipated. Regardless of whether the *prima facie* case would have been characterized as strong or weak, the examiner must consider all of the evidence anew." *In re Piasecki*, 745 F.2d 1468, 223 USPQ 785 (Fed. Cir. 1984).

Claim 1 recites a method of manufacturing a web of a cigarette wrapper having an applied pattern of add-on material comprising: moving a base web along a first path; preparing a slurry of add-on material; and repetitively discharging the slurry of add-on material upon the moving base web. The step of preparing a slurry of add-on material includes: cooking a fibrous cellulosic material, bleaching the material, pressing the cooked and bleached material to remove liquid, drying the pressed material, milling the dried material to produce fibers of a desired size, and mixing the milled material with water to hydrate the material and produce a slurry.

As explained above, "dry grinding" results in add-on material having a very narrow range of cellulose fiber sizes, and as a result the areas of the cigarette paper having the add-on material provide consistent and predictable performance; the add-on material is produced in much shorter time and with consumption of less energy than would be required to produce similar add-on material having a comparably narrow range of fiber sizes using techniques wherein a wet slurry material is repeatedly refined using multi-disk refiners.

While it is respectfully submitted that a *prima facie* case of obviousness has not been established, it is further respectfully submitted that the improved results and more economical process associated with "dry grinding" in the claimed method, as compared to "wet grinding", rebuts any possible *prima facie* case of obviousness.

Applicants again respectfully note that the newly claimed combination of steps provides important advantages, including, as outlined in the present specification, for example, better control of fiber length of the add-on material, which provides a more consistent and predictable performance of the banded paper (Page 3, Paragraph [0010], Lines 4-7), and savings in time and energy consumption during manufacturing operations (Page 3, Paragraph [0010], Lines 7-9, and at Page 6, Paragraph [0017]). Accordingly, the claimed combination both enhances the ultimate product and presents a novel combination of steps of making the ultimate product. Applicants respectfully submit that the claimed combination of steps and the advantages thereof are neither taught nor suggested by the prior art of record.

Accordingly, withdrawal of the rejection is respectfully requested.

#### CONCLUSION

From the foregoing, further and favorable action in the form of a Notice of Allowance is earnestly solicited. Should the Examiner feel that any issues remain, it is requested that the undersigned be contacted so that any such issues may be adequately addressed and prosecution of the instant application expedited.

Respectfully submitted,

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Date: May 16, 2007

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